



IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A medical ~~image photographing~~ imaging system, comprising:

a first medical ~~image photographing~~ imaging apparatus;

a second medical ~~image photographing~~ imaging apparatus; and

a data managing system connected to said first and second ~~medical image photographing~~ apparatuses via a network,

wherein said first medical ~~image photographing~~ imaging apparatus includes:

a photographing system to obtain raw data or projection data ~~photographing data~~ related to a subject by photographing the subject under at least one photographing condition; and

a transmitter to transmit, via said network to said data managing system, said raw data or protection data ~~photographing data~~ and appended information, which is information included in said at least one photographing condition and needed to generate biological information related to the subject, and

wherein said data managing system includes:

a first receiver to receive said raw data or projection data ~~photographing data~~ and said appended information;

a memory to store said raw data or projection data ~~photographing data~~ and said appended information received; and

a second transmitter to transmit said raw data or projection data ~~photographing data~~ and said appended information to said second medical ~~image photographing~~ imaging apparatus, and

wherein said second medical ~~image photographing~~ imaging apparatus includes:

a second receiver to receive said raw data or projection data ~~photographing data~~ and said appended information; and

a biological information generating unit to generate the biological information related to the subject, based on said raw data or projection data ~~photographing data~~ and said appended information received.

Claim 2 (Currently Amended): The medical ~~image photographing~~ imaging system according to claim 1, wherein:

each of said first and second medical ~~image photographing~~ imaging apparatuses is one of an X-ray computed tomographic apparatus, an X-ray diagnostic apparatus, a magnetic resonance imaging apparatus, an ultrasonic diagnostic apparatus, and a nuclear medical diagnostic apparatus; and

the biological information is a time intensity curve.

Claim 3 (Currently Amended): The medical ~~image photographing~~ imaging system according to claim 1, wherein:

each of said first and second medical ~~image photographing~~ imaging apparatuses is an X-ray computed tomographic apparatus having a plurality of data acquisition element arrays;

~~said photographing data is one of raw data and projection data;~~

the biological information is a reconstruction image; and

said appended information includes information related to the number of element arrays used to read out data among said plurality of data acquisition element arrays.

Claim 4 (Currently Amended): The medical ~~image photographing~~ imaging system according to claim 1, wherein:

each of said first and second medical ~~image photographing~~ imaging apparatuses is a magnetic resonance imaging apparatus;

~~said photographing data is one of raw data and projection data;~~

the biological information is a reconstruction image; and

said appended information includes information related to a channel band for a high-frequency receiving coil.

Claim 5 (Currently Amended): An X-ray computed tomographic system, comprising:  
a first X-ray computed tomographic apparatus;  
a second X-ray computed tomographic apparatus; and  
a data managing system connected to said first and second X-ray computed tomographic apparatuses via a network,

wherein said first X-ray computed tomographic apparatus includes:

an X-ray irradiating unit to irradiate an X-ray to a subject while rotating about the subject;

an X-ray detecting unit having a plurality of detecting element arrays aligned in a slice direction, in each of which a plurality of detecting elements, each generating electrical charges based on an incident X-ray, are aligned in a channel direction;

a data acquisition unit, having a plurality of data acquisition element arrays, to read out the electrical charges from said plurality of detecting elements by using a certain number of data acquisition element arrays among said plurality of data acquisition element arrays and generate ~~photographing data~~ raw data or projection data based on the electrical charges; and

a first transmission unit to transmit, via said network to said data managing system, said ~~photographing data~~ raw data or projection data and appended information including the number of data acquisition element arrays used when reading out the electrical charges, and

wherein said data managing system includes:

a first reception unit to receive said ~~photographing data~~ raw data or projection data and said appended information;

a storage unit to store said ~~photographing data~~ raw data or projection data and said appended information received; and

a second transmission unit to transmit said ~~photographing data~~ raw data or projection data and said appended information to said second X-ray computed tomographic apparatus, and

wherein said second X-ray computed tomographic apparatus includes:

a second reception unit to receive said ~~photographing data~~ raw data or projection data and said appended information; and

a reconstruction unit to perform image reconstruction based on said raw data or projection data ~~photographing data~~ and said appended information received.

Claim 6 (Currently Amended): The X-ray computed tomographic system according to claim 5, ~~wherein said photographing data is one of raw data and projection data~~ further comprising:

a judging unit to judge, based on said appended information, whether image reconstruction based on one of said raw data and said projection data is possible in said X-ray computed tomographic apparatus,

wherein said transmission unit transmits one of said raw data and said projection data, and said appended information to said second X-ray computed tomographic apparatus when said judging unit judges the reconstruction as being possible.

Claim 7 (Currently Amended): The X-ray computed tomographic system according to claim 5, wherein said first transmission unit transmits said ~~photographing data~~ raw data or projection data and said appended information including information related to the number of the data acquisition elements in the slice direction to said data managing system via said network.

Claim 8 (Original): The X-ray computed tomographic system according to claim 5, wherein said reconstruction unit chooses, based on the number of arrays used, one of a first reconstruction method that does not concern an influence of a cone angle of an X-ray irradiated from said X-ray irradiating unit and a second reconstruction method that concerns the influence of the cone angle of the X-ray, and performs image reconstruction through the reconstruction method chosen.

Claim 9 (Original): The X-ray computed tomographic system according to claim 5, wherein said reconstruction unit chooses said first reconstruction method when 4 is given as said certain number, and said second reconstruction method when one of 8 and 16 is given as said certain number.

Claim 10 (Currently Amended): The X-ray computed tomographic system according to claim 5, wherein:

said data managing system further includes a judging unit to judge, based on said appended information, whether image reconstruction based on said ~~photographing data~~ raw data or projection data is possible in said second X-ray computed tomographic apparatus; and

said second transmission unit transmits said raw data or projection data ~~photographing data~~ and said appended information to said second X-ray computed tomographic apparatus only when said judging unit judges the reconstruction as being possible.

Claim 11 (Original): The X-ray computed tomographic system according to claim 5, wherein said data managing system further includes a backup data generating unit to generate backup data in a certain storage unit, based on said photographing data and said appended information.

Claim 12 (Original): The X-ray computed tomographic system according to claim 11, wherein:

said data managing system further includes a table creating unit to create a table that correlates said photographing data and said appended information with the storage unit in which said backup data has been generated; and  
said storage unit stores said table.

Claim 13 (Original): The X-ray computed tomographic system according to claim 5, wherein said first X-ray computed tomographic apparatus and said second X-ray computed tomographic apparatus are a single apparatus.

Claim 14 (Original): A data managing system connected to a first X-ray computed tomographic apparatus and a second X-ray computed tomographic apparatus via a network, said data managing system comprising:

a reception unit to receive, from said first X-ray computed tomographic apparatus, one of raw data and projection data obtained in said first X-ray computed tomographic

apparatus and appended information including the number of data acquisition element arrays used when obtaining one of said raw data and said projection data;

a storage unit to store one of said raw data and said projection data, and said appended information received; and

a transmission unit to transmit one of said raw data and said projection data, and said appended information to said second X-ray computed tomographic apparatus.

Claim 15 (Original): The data managing system according to claim 14, further comprising a backup data generating unit to generate backup data in a certain storage unit, based on said projection data and said appended information.

Claim 16 (Original): The data managing system according to claim 14, further comprising:

a judging unit to judge, based on said appended information, whether image reconstruction based on one of said raw data and said projection data is possible in said second X-ray computed tomographic apparatus,

wherein said transmission unit transmits one of said raw data and said projection data, and said appended information to said second X-ray computed tomographic apparatus when said judging unit judges the reconstruction as being possible.

Claim 17 (Original): The data managing system according to claim 16, further comprising:

a data processing unit to process one of said raw data and said projection data to enable one of generation and display of a reconstruction image based on one of said raw data

and said projection data in said second X-ray computed tomographic apparatus when said judging unit judges the reconstruction as being impossible,

wherein said transmission unit transmits said appended information and one of said raw data and said projection data processed by said processing unit to said second X-ray computed tomographic apparatus when said judging unit judges the reconstruction as being impossible.

Claim 18 (Original): The data managing system according to claim 16, wherein:

said data processing unit performs image reconstruction based on one of said raw data and said projection data, and said appended information; and

said transmission unit transmits reconstruction image data to said second X-ray computed tomographic apparatus.

Claim 19 (Original): The data managing system according to claim 14, further comprising:

a table creating unit to create a table that correlates one of said raw data and said projection data, and said appended information with the storage unit in which said backup data has been generated,

wherein said storage unit stores said table.

Claim 20 (Original): An X-ray computed tomographic apparatus connected, via a network, to a data managing system managing projection data, said apparatus comprising:

an X-ray irradiating unit to irradiate an X-ray to a subject while rotating about the subject;

an X-ray detecting unit having a plurality of detecting element arrays aligned in a slice direction, in each of which a plurality of detecting elements, each generating electrical charges based on an incident X-ray, are aligned in a channel direction;

a data acquisition unit, having a plurality of data acquisition element arrays, to read the electrical charges from said plurality of detecting elements by using a certain number of data acquisition element arrays among said plurality of data acquisition element arrays and generate one of raw data and projection data based on the electrical charges; and

a transmission unit to transmit, via said network to said data managing system, one of said raw data and said projection data, and appended information including the number of data acquisition element arrays used when reading out the electrical charges.

Claim 21 (Original): The X-ray computed tomographic apparatus according to claim 20, wherein said transmission unit transmits said projection data and said appended information including information related to the number of said data acquisition elements in the slice direction to said data managing system via said network.

Claim 22 (Original): An X-ray computed tomographic apparatus connected, via a network, to a data managing system managing projection data, said apparatus comprising:

a reception unit to receive, from said data managing system, one of raw data and projection data obtained in an X-ray computed tomographic apparatus, and appended information including the number of data acquisition element arrays used when obtaining one of said raw data and said projection data; and

a reconstruction unit to perform image reconstruction based on one of said raw data and said projection data, and said appended information received.

Claim 23 (Original): The X-ray computed tomographic apparatus according to claim 22, wherein said reconstruction unit chooses, based on the number of arrays used, one of a first reconstruction method that does not concern an influence of a cone angle of an X-ray irradiated from said X-ray irradiating unit and a second reconstruction method that concerns the influence of the cone angle of the X-ray, and performs image reconstruction through the reconstruction method chosen.

Claim 24 (Original): The X-ray computed tomographic apparatus according to claim 22, wherein said reconstruction unit chooses said first reconstruction method when 4 is given as the number of data acquisition element arrays used, and said second reconstruction method when one of 8 and 16 is given as said certain number.

Claim 25 (Original): The X-ray computed tomographic apparatus according to claim 22, further comprising:

a judging unit to judge whether one of said raw data and said projection data transmitted from said data managing system is reconstructible in said reconstruction unit,

wherein said reception unit receives one of said raw data and said projection data, and said appended information only when said judging unit judges the reconstruction as being possible.

Claim 26 (Original): The X-ray computed tomographic apparatus according to claim 22, further comprising:

a judging unit to judge whether one of said raw data and said projection data transmitted from said data managing system is reconstructible in said reconstruction unit; and

a request unit to request said data managing system to perform data processing on one of said raw data and said projection data to enable one of generation and display of a reconstruction image based on one of said raw data and said projection data in said X-ray computed tomographic apparatus when said judging unit judges the reconstruction as being possible,

wherein said reception unit receives, from said data managing system, said appended information and one of said raw data and said projection data having been processed.

Claim 27 (New): The medical imaging system according to claim 1, wherein the data managing system further includes:

a judging unit to judge, based on said appended information, whether image reconstruction based on one of said raw data and said projection data is possible in said second X-ray computed tomographic apparatus, and

wherein said transmission unit transmits one of said raw data and said projection data, and said appended information to said second X-ray computed tomographic apparatus when said judging unit judges the reconstruction as being possible.